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EXAMINER

SIMONE, CATHERINE A

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**BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES**

Application Number: 09/974,710
Filing Date: October 09, 2001
Appellant(s): FLANIGAN ET AL.

Jeffrey M. Olofson
For Appellant

EXAMINER'S ANSWER

This is in response to the appeal brief filed January, 28, 2010 appealing from the Office action mailed September 1, 2009.

(1) Real Party in Interest

The examiner has no comment on the statement, or lack of statement, identifying by name the real party in interest in the brief.

(2) Related Appeals and Interferences

The examiner is not aware of any related appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

(3) Status of Claims

The following is a list of claims that are rejected and pending in the application:

Claims 1, 3-7, 12, 14-15, 19-22, 26, 28-53, 55 and 57-60 are pending. Claims 1, 3-7, 12, 14-15, 19-22, 26, 28-35 and 57-60 stand rejected.

(4) Status of Amendments After Final

The examiner has no comment on the appellant's statement of the status of amendments after final rejection contained in the brief.

(5) Summary of Claimed Subject Matter

The examiner has no comment on the summary of claimed subject matter contained in the brief.

(6) Grounds of Rejection to be Reviewed on Appeal

The examiner has no comment on the appellant's statement of the grounds of rejection to be reviewed on appeal. Every ground of rejection set forth in the Office action from which the

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appeal is taken (as modified by any advisory actions) is being maintained by the examiner except for the grounds of rejection (if any) listed under the subheading "WITHDRAWN REJECTIONS." New grounds of rejection (if any) are provided under the subheading "NEW GROUNDS OF REJECTION."

(7) Claims Appendix

The examiner has no comment on the copy of the appealed claims contained in the Appendix to the appellant's brief.

(8) Evidence Relied Upon

JP 11-181367	HATA	07-1999
WO 97/33946	HATA	09-1997

(9) Grounds of Rejection

The following grounds of rejection are applicable to the appealed claims:

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1, 3, 4, 5, 7, 12, 14, 15, 19, 22, 26 and 57-60 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Hata (JP 11-181367).

Regarding claims 1 and 22, Hata discloses an article (window glass structure) comprising at least one adhesive layer (*Drawings 1, 3 and 4, layer 10*) with a first major surface and a

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second major surface (*Drawings 1, 3 and 4*), wherein at least one of the first and second major surfaces is a structured surface (*Drawings 1, 3 and 4, surface 2*), and a backing (*Drawings 3 and 4, backing 31*) directly adjacent to the structured surface of the at least one adhesive layer, wherein both surfaces of the backing are non-structured (*Drawings 3 and 4, backing 31*). The article comprises discrete, encapsulated reservoirs (*Drawings 1, 3 and 4, reservoirs 3*) between the structured surface of the at least one adhesive layer and the backing. The article has a non-structured exposed adhesive surface that can be adhered to a target substrate (*Drawing 3*).

Hata fails to disclose each reservoir having a void volume of less than 20 nL and the article having a peel strength of at least 21-42 oz/0.5 inch for a thickness of 0.003 to 0.007 inches.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified the article in Hata to have a peel strength of at least 21-42 oz/0.5 inch for a thickness of 0.003 to 0.007 inches and to have modified the reservoirs of the article in Hata to each have a void volume of less than 20 nL, since it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art in absence of showing unexpected results. *MPEP 2144.05 (II)*.

Regarding claims 3 and 4, Hata discloses that the adhesive layer is a pressure sensitive adhesive selected from the group consisting of acrylics, natural and synthetic rubbers, ethylene vinyl acetate, vinyl ethers, silicones, poly(alpha olefins), and combinations thereof (*paragraphs 0023 and 0031-0033*).

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Regarding claim 7, Hata discloses at least one non-adhesive layer in contact with one of the first and second major surfaces (*Drawing 4, layer 32 and paragraph 0023*).

Regarding claims 5 and 57, Hata fails to disclose the thickness of the article being of about 2 μm to about 500 μm and each of the reservoirs having a void volume less than 4 nL. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified the thickness of the article or the volume of the reservoirs in Hata to have the claimed ranges, since it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art in absence of showing unexpected results. *MPEP 2144.05 (II)*.

Regarding claims 12, 14, 15 and 58-60, Hata discloses reservoirs that contain at least one deliverable or non-deliverable vibration-damping fluid substance (*air, paragraph 0021*).

Regarding claim 26, Hata discloses a backing adjacent the second major surface (*Drawing 4, backing 32*).

Claims 6, 20, 21 and 28-35 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Hata (JP 11-181367) in view of Hata (WO 97/33946).

Hata (JP 11-181367) teaches the claimed article as described above.

Hata (JP 11-181367) fails to teach a second adhesive layer having a first major surface and a second major surface wherein at least one of the first and second major surfaces is a structured surface, wherein the at least one adhesive layer and the second adhesive layer are in contact; and the first major surface of the first adhesive layer being a structured surface and the second major surface of the first adhesive layer being a non-structured adhesive surface, and the

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first major surface of the second adhesive layer being a structured surface and the second major surface of the second adhesive layer being a non-structured surface, and the second major surface of the first adhesive layer contacting the first major surface of the second adhesive layer.

Hata (WO 97/33946) teaches an adhesive sheet having first and second adhesive layers (Fig. 3a), wherein the second adhesive layer has a first major surface and a second major surface and at least one of the first and second major surfaces is a structured surface, and the first adhesive layer and the second adhesive layer are in contact, and the first major surface of the first adhesive layer is a structured surface and the second major surface of the first adhesive layer is a non-structured adhesive surface, and the first major surface of the second adhesive layer is a structured surface and the second major surface of the second adhesive layer is a non-structured surface, and the second major surface of the first adhesive layer contacts the first major surface of the second adhesive layer for the purpose of providing a multi-layered adhesive sheet that can absorb, subside or release an external action such as impact, vibration (including sound), heat etc. (page 3, lines 6-7).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have provided the structure in Hata (JP 11-181367) with a two-layered adhesive sheet instead of one layer of adhesive wherein the second adhesive layer has a first major surface and a second major surface and at least one of the first and second major surfaces is a structured surface, and have the first adhesive layer and the second adhesive layer be in contact, and the first major surface of the first adhesive layer being a structured surface and the second major surface of the first adhesive layer being a non-structured adhesive surface, and the first major surface of the second adhesive layer being a structured surface and the second major surface of

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the second adhesive layer being a non-structured surface, and have the second major surface of the first adhesive layer contacting the first major surface of the second adhesive layer as suggested by Hata (WO 97/33946) in order to form a multi-layer adhesive structure providing improved heat-insulating, soundproofing, and vibrationproofing effects.

(10) Response to Argument

First Ground of Rejection

Appellants argue “Not only is there no teaching, suggestion, disclosure or enablement in Hata-1 that the articles formed with the protrusions of Hata-1 would have such void volumes, in fact Hata-1 teaches away from such articles...Hata-1 does indeed teach that volumes of less than 1 mm^3 (1,000 nL) would reduce the heat shielding and vibration resistance and therefore Hata-1 does teach away from the void volumes of the present claims, such void volumes are non-functional embodiments, not merely non-preferred embodiments”.

It is to be pointed out that Hata-1 teaches the reservoirs to each have a void volume *preferably* in the range of $1\text{-}600\text{ mm}^3$ (see page 7 of Description, paragraph 0022). Therefore, the volume of each reservoir in Hata does not necessarily have to be in the range of $1\text{-}600\text{ mm}^3$, it is just *preferred* that each reservoir in Hata have a void volume in the range of $1\text{-}600\text{ mm}^3$. Thus, the volume of each reservoir in Hata could be smaller than 1 mm^3 , such as less than 20 nL, if so desired. Accordingly, Hata does not teach away from smaller volumes, such as less than 20 nL, for the reservoirs. Disclosed examples and preferred embodiments do not constitute a teaching away from a broader disclosure or nonpreferred embodiments. See MPEP 2123 (II). Furthermore, it is to be pointed out that Hata-1 discloses that if the volume is less than 1 mm^3 there is a tendency for heat insulation and a vibration control effect to fall, which implies the

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article would have reduced heat insulation and vibration control effect if the volume is less than 1 mm^3 . Hata does not specifically disclose that the article would be non-functional if the void volume is less than 1 mm^3 , the article would just have a reduced heat insulation and vibration control effect, which is a non-preferred embodiment of Hata-1. As a result, Hata-1 does not teach away from the void volumes of the present claims, such void volumes are just non-preferred embodiments, not non-functional embodiments.

Furthermore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified the reservoirs of the article in Hata-1 to have a void volume of less than 20 nL, since it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art in absence of showing unexpected results. *MPEP 2144.05 (II)*. Appellants have not provided any evidence of the criticality of the claimed range for the volume of the reservoirs. Absent a teaching of the criticality or showing of unexpected results from the volume of each of the reservoirs being within the claimed range, it would not provide a patentable distinction over the prior art. See *MPEP 2144.05 (II)*.

Second Ground of Rejection

Appellants argue “there is no teaching, suggestion, disclosure or enablement in Hata-1 or Hata-2 for articles that have such void volumes. In fact, as described above, Hata-1 teaches volumes in the range $1\text{-}600 \text{ mm}^3$ and Hata-2 teaches volumes of 0.8 to 600 mm^3 . Further, Hata-1 teaches away from smaller volumes by stating that smaller volumes would not permit the article to function in the way designed. Therefore, there is no way to combine these references and obtain the present claims, nor is there any motivation to do so based upon the teachings therein”.

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As shown above, Hata-1 teaches the reservoirs to each have a void volume *preferably* in the range of 1-600 mm³ (see page 7 of Description, paragraph 0022). Therefore, the volume of each reservoir in Hata does not necessarily have to be in the range of 1-600 mm³, it is just *preferred* that each reservoir in Hata have a void volume in the range of 1-600 mm³. Thus, the volume of each reservoir in Hata could be smaller than 1 mm³, such as less than 20 nL, if so desired. Accordingly, Hata does not teach away from smaller volumes, such as less than 20 nL, for the reservoirs. Disclosed examples and preferred embodiments do not constitute a teaching away from a broader disclosure or nonpreferred embodiments. See MPEP 2123 (II).

Furthermore, it is to be pointed out that Hata-1 discloses that if the volume is less than 1 mm³ there is a tendency for heat insulation and a vibration control effect to fall, which implies the article would have reduced heat insulation and vibration control effect if the volume is less than 1 mm³. Hata does not specifically disclose that the article would be non-functional if the void volume is less than 1 mm³, the article would just have a reduced heat insulation and vibration control effect, which is a non-preferred embodiment of Hata-1. As a result, Hata-1 does not teach away from the void volumes of the present claims, such void volumes are just non-preferred embodiments, not non-functional embodiments.

(11) Related Proceeding(s) Appendix

No decision rendered by a court or the Board is identified by the examiner in the Related Appeals and Interferences section of this examiner's answer.

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For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

/CAS/

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